

a year or longer. When they are to be used for longer periods or under conditions where the tags come in contact with the ground, they are coated with paraffin after labeling. One method is to dip them in a mixture of gasoline and paraffin (proportion, 1 quart of gasoline to one-half pound paraffin). The

gasoline evaporates, leaving a film of paraffin. If the tags become coated with mud, they can easily be washed and the ink shows up clearly. Such tags may be used in a variety of ways, for when treated in this manner they last exceptionally well.—*Jour. N. Y. Botanical Garden.*

## SOCIETIES AND COLLEGES.

### THE HOSPITAL CORPS OF THE NAVY.\*

At a meeting of the National Pharmaceutical Service Association held in the Philadelphia College of Pharmacy on Friday evening, December 20th, Lieutenant Commander George F. Cottle, Detail Officer of the Hospital Corps of the United States Navy, and Lieutenant W. T. Minnick, Commandant of the Hospital Corps unit, training at the Philadelphia College of Pharmacy, presented a comprehensive and interesting account of the work of the organization in the war.

Up to 1898 the "apothecary" of the Navy was an appointee of the medical officer under whom he was to serve, being selected from the "baymen" or from civil life. The "baymen" were enlisted men detailed as nurses from other branches of the Naval service and frequently were those who had proven inefficient elsewhere. They were not selected for special fitness or training for the work. When the services of the apothecary were no longer needed, he was discharged from the Naval service.

As the work of the Medical Corps increased, and more need was found for proper hospital facilities and medical aid, a permanent Hospital Corps was established by law. This was in 1898. The Corps consisted of Hospital Apprentices, Hospital Apprentices, 1st class, Hospital Stewards, and twenty-five Pharmacists, with warrant rank.

No further change was made in the organization of the Corps until 1912, when the rank of "Chief Pharmacist" was established. This grade carried with it pay and allowances of an ensign, which is that of the Annapolis graduate when first detailed to duty.

The services rendered by the Hospital Corps had been of such value as to justify the recommendation by the Surgeon-General of the Navy for the advanced rank.

In 1916, in recognition of the efficiency shown by these pharmacists, legislation was secured from Congress, authorizing the appointment of as many pharmacists as the needs of the service demanded, and in 1917 the Surgeon-General further recognized the importance of the service by recommending temporary rank of Lieutenant (Junior Grade), and Lieutenant, for 82 of the members of the Corps, and the appointment of 220 Pharmacists (temporary). The several ratings of the Corps are Hospital Apprentices, second and first class; Pharmacist's mate, third, second and first class; Chief Pharmacist's Mate (acting appointment), Chief Pharmacist's Mate (permanent appointment); Pharmacist, and Chief Pharmacist. For the period of the war, all Pharmacists and Chief Pharmacists were advanced first to Lieutenants (Junior Grade) and later to Lieutenants, and a large number of Chief Pharmacists' Mates were given temporary appointments as Pharmacists.

The duties of the members of this Corps, especially those who hold the higher ratings, are greatly varied and call for many qualifications and extensive training.

*Nursing.*—Inasmuch as women nurses are not available for sea duty, this group of men are required to perform any nursing duties which the needs of the service may demand, such as the care of the sick, giving of baths, the care of the bed, and bed clothing, taking of temperature, pulse, and respiration, preparing of charts, the administration of enemas and hypodermics, the preparation of patients for the operating room and any of the various services appertaining to nursing.

*Operating Room.*—In addition to the preparation of the patients for operations, these men are trained to take care of the surgical instruments and equipment, to do all of the necessary sterilization, know the instruments, care for them and to make all preparation for operations. During the operation, they may serve as assistants to the surgeon, and often

\* From reports of Secretary E. Fullerton Cook of the National Pharmaceutical Service Association.

administer the anesthetic. They may also be called upon to prepare the injection and assist in administering arsphenamin (salvarsan).

*Ward Management.*—The Hospital Corpsmen become the responsible officials in the establishment and management of the Hospitals. They are responsible for much of the internal organization of the hospital, for the cleanliness and routine work of the ward, and also responsible for all records and property.

*X-Ray Department.*—A limited number of men have received special training as X-ray operators. This is becoming increasingly important and the complete specialized training must include the knowledge of apparatus and experience in the taking of X-ray pictures and X-ray examinations, and also the development of the plates and making of prints.

*Recruiting.*—In the recruiting stations of the Navy, the Hospital Corpsmen serve as assistants, making the preliminary physical examinations, preparing the necessary records and securing the identification data, including the making of finger print impressions.

*Commissary.*—Pharmacists are responsible for the planning and administration of the commissary department and equipping a Naval hospital for any number of patients up to 2,000. This includes not only the equipment of the various wards and divisions of the hospital, but also the procuring of the food, its inspection and the supervision of the preparation of special diets for the patient.

*Transportation.*—The transportation of wounded and sick on board ship is often a difficult problem, and requires knowledge and skill in the methods of handling, the use of stretchers and ambulances, and the preparation of the injured for transportation. This duty falls entirely upon the Hospital Corps.

*First Aid.*—As the hospital corpsman secures experience and rating justifying advancement to the rate of Chief Pharmacist's Mate, he is often placed on "independent duty." Most of the smaller ships of the Navy, destroyers, submarines, mine-sweepers, and cargo ships, need medical aid, and the hospital corpsman here serves as the first aid medical officer. Every kind of emergency work may fall to his lot. Sickness, accidents, or other injuries may require his attention at any time. He must be familiar with antidotes to poisons, and all of the many emergency conditions which he may face. This includes, not only

the occurrences which may happen aboard ship, but, when ashore in our Island Possessions, he may be called upon at outlying stations to administer first aid and help to the native population.

*Laboratory Technique.*—Their knowledge of chemistry and microscopy must be sufficient to aid in a proper control over the water supply, to make an examination of foods, carry out such clinical tests as may be demanded, such as blood examination, urine tests, examination of feces, the Widal and Wassermann tests, etc., as any of these may become a part of their duty.

*Pharmacy.*—As a pharmacist, the hospital corpsman will have charge of the dispensary either in hospitals on land or on board ship. This rarely calls for the manufacture of pharmaceuticals, but must embrace a knowledge of the medicines on the supply table of the Navy as well as those generally used in medical practice and sufficient chemical training to pass upon the quality of these supplies. The ordering and the proper care of the medical supplies and pharmaceutical equipment, together with the bookkeeping records of the department, the compounding of the prescriptions, and the preparation of such materials as the Dakin-Carrel Solution, are a part of the every-day work.

*Clerical.*—An important function of the Hospital Corpsman is clerical. The typewriter must be used for reports. They must be familiar with the bookkeeping methods of the commissary department and must be prepared to take charge of, or supervise such records. They must supervise the Hospital galley (kitchen) and mess-hall, and must oversee the ordering of supplies and are responsible for the storage and quality of foods. They must be familiar with all forms used in the medical corps, and be able to properly prepare them. These forms include records of enlistment, discharge, medical examinations, laboratory tests, sick and death reports, requests for leave, official correspondence, etc.

*Hygiene and Sanitation.*—At any time, the hospital corpsman may be detailed to serve on shore duty with the marines. Here he occupies the important position of sanitary officer. He must be qualified to establish a camp, look after the water supply, examine the quality of water available, and, if necessary, purify it for the troops, take care of all refuse about the camp, establish proper

latrines, provide bathing facilities and install and superintend the operation of incinerators for the disposal of all sewage and refuse. In this service, he must also be prepared to establish and equip a field hospital and aid in its management, as has already been outlined.

#### LIEUTENANT COMMANDER COTTLE.

Lieutenant Commander Cottle illustrated the work of the Corps by a number of lantern slides and drawings, showing the possibilities and training given by the Navy under the present Naval regulations, and also the enormous growth of the organization during the present war. He also spoke of the splendid service rendered, under many trying conditions, by this branch of the service.

Dr. Cottle in subsequent remarks, in answer to some of the comments, set forth the spirit which should animate those who seek service in the Corps in war time. The essence of his statement was that every American citizen undoubtedly wished to serve his Country in some capacity during such a time of struggle as that through which we have passed, and that, if his opportunity came through service in this Corps, then the question of mere personal advantage or rating rightly took a second place as compared with service to be rendered. He stated that it could not be expected that men without proper military training should immediately upon first enlistment be given a high rating; that efficient Naval service required extensive military training, and that the opportunity to do one's bit in an honorable way had been welcomed by many men, and should be gratifying to the

young men of the Country. He called attention, however, to the fact that for men qualified both in professional and military subjects, there was provided in the Navy an excellent opportunity for recognition and pay in the Hospital Corps, and that for men in the Naval service and who were prepared to assume the increased responsibility of war, temporary commissions, and larger opportunity for service were given.

In concluding his report of the meeting Secretary E. Fullerton Cook states that it will be seen by pharmacists that the duties of members of this corps are far broader than the usual activities of the apothecary in civil life, although pharmaceutical training in accordance with the curriculum of a modern college of pharmacy embraces a large percentage of the work demanded of the hospital corpsmen. The full recognition of pharmacy in the Navy with its related activities, as the collaborator with the physician in the maintenance of health, treatment of disease, and the healing of wounds has been established, and every pharmacist in the country should lend his aid to the Naval authorities. Men who secure commissions are required to successfully pass severe competitive examinations. Naval pharmacists firmly believe in proper control over the granting of commissions to Pharmacists in the Navy, and with the new light which has come to all who are interested in the Medical Department of the Navy and in the work of its Pharmacists and Hospital Corpsmen, the N. P. S. A. may well be proud of the work that has been done by pharmacists in the Naval service and glad of the recognition the Navy has accorded them.

#### CHANGES OF ADDRESS.

All changes of address of members should be sent to the General Secretary promptly.

The Association will not be responsible for non-delivery of the Annual Volume or Year Book, or of the JOURNAL unless notice of the change of address is received before shipment or mailing.

Both the old and the new address should be given thus:

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Titles or degrees to be used in publications or in the official records should be given, and names should be *plainly* written or typewritten.

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From 1314 Wyoming St., Dallas, Tex.

To 1314 Young St., Dallas Tex.

GARVEY, JAS.

From 1429 Euclid Ave., Philadelphia, Pa.

To 895—97th St., Woodhaven, N. Y.

GAY, MRS. ST. CLAIRE.

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